1	2	3	4	5	6
30.	Chandigarh	11	2	1	1
31.	D & N Haveli	49	23	8	15
32.	Daman & Diu	11	4	1	3
33.	Delhi	148	29	29	0
34.	Lakshadweep	3	3	1	2
35.	Pondicherry	48	24	21	3
	TOTAL:	328726	141345	55876	85469

Systems to help improving food production

536. SHRIMATI N.P. DURGA: Will the Minister of AGRICULTURE be pleased to state:

(a) how the Geographic Information System, Remote Sensing, Global Position System, Simulation Modeling are helping in increasing the food production in the country;

(b) whether it is a fact that BARC has developed 29 improved varieties for commercial cultivation;

(c) if so, the details thereof; and

(d) how his Ministry is planning to go ahead in application of biosensors, biotechnology, nano-technology, etc., for improving the production of foodgrains in the country?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI KANTI LAL BHURIA): (a) These technologies having applications across diverse fields of resource characterization, land use planning, precision farming, crop forecasting, flood & drought monitoring etc. have helped increase agricultural production in the country.

(b) and (c) Yes, Sir. Using radiation induced mutation and cross-breeding, BARC has developed 29 improved varieties and released for commercial cultivation. These comprise 16 in oilseeds (12 groundnut, 2 soyabean and 2 mustard); 11 in pulses (4 blackgram, 5 greengram and 2 pigeonpea); and 1 each of rice and jute.

(d) The ICAR is developing improved cultivars/varieties with high yield potential, tolerance to biotic and abiotic stresses and better quality traits etc. through bio-technological interventions. There is proposal for establishing Institutes on Agricultural Biotechnology, Biotic and Abiotic Stress Management during XIth Plan.

The nanotechnology has potential in enhancing resource use efficiency in terms of soil-water-nutrient-pesticide etc. through development of suitable nano-products and biosensors. Research initiatives to this direction are being made to harness the potential.

Suicides by farmers

537. SHRI N.R. GOVINDARAJAR: Will the Minister of AGRICULTURE be pleased to state:

(a) whether the cases of suicide by farmers are increasing rapidly in various parts of the country despite the rehabilitation packages;